

## CREDIT OPINION

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## Georgia (State of)

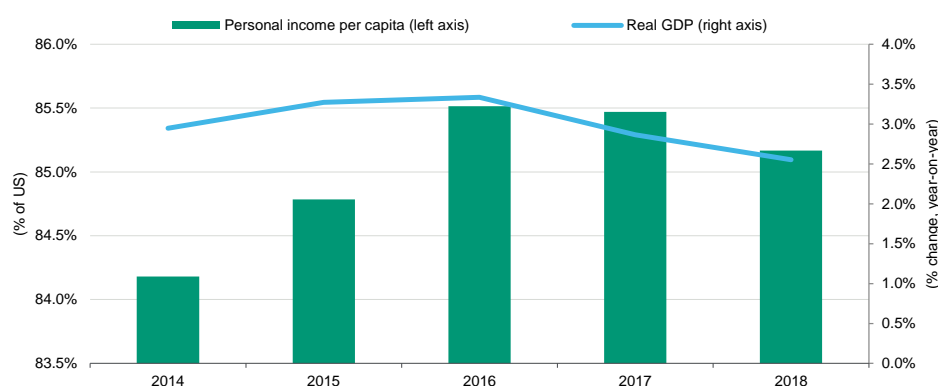
Update following affirmation of ratings

### Summary

Georgia's (Aaa stable) strong credit profile reflects low debt and pension obligations and robust fiscal management and governance. A rapidly growing and strong economy mitigates below-average resident income and vulnerabilities that manifested in past recessions, such as a large decline in economically sensitive revenue.

Exhibit 1

Economic growth has improved Georgia's income levels, despite slowdown last year



Sources: US Bureau of Economic Analysis, Moody's Investors Service

### Credit strengths

- » Robust economy outperforming the nation
- » Strong management and governance practices
- » Continuously positive financial results since the recession, alongside low debt and fixed costs

### Credit challenges

- » Below-average resident income, especially in rural areas of the state
- » A history of high revenue volatility in recent recessions

### Rating outlook

The stable outlook recognizes that Georgia has likely built up reserves sufficient to preserve its credit quality at a high level even if the economy were to enter a recession.

## Factors that could lead to an upgrade

- » Not applicable

## Factors that could lead to a downgrade

- » A materially diminished financial position
- » Growth in long-term liabilities and fixed costs that outpace expansion of the state's economy and revenue base
- » A departure from strong fiscal management and governance practices

## Key indicators

Exhibit 2

### Robust balances and low liabilities support Georgia's credit profile

Georgia (State of)	2014	2015	2016	2017	2018	50-State Median (2017)
Operating Fund Revenues (000s)	\$20,775,112	\$22,176,375	\$23,893,614	\$25,325,670	\$26,349,225	\$10,869,281
Available Balances as % of Operating Fund Revenues	5.2%	5.8%	7.5%	8.7%	9.5%	4.6%
Nominal GDP (billions)	\$484.9	\$512.7	\$538.2	\$562.1	\$588.2	\$224.0
Nominal GDP Growth	5.3%	5.7%	5.0%	4.4%	4.6%	3.9%
Total Non-Farm Employment Growth	2.8%	2.8%	2.6%	1.9%	1.9%	1.1%
Fixed Costs as % of Own-Source Revenue	11.8%	11.0%	10.5%	11.2%	NA	8.9%
Adjusted Net Pension Liabilities (000s)	\$17,301,277	\$19,180,695	\$19,782,643	\$26,236,050	\$23,900,231	\$12,033,341
Net Tax-Supported Debt (000s)	\$10,498,750	\$10,478,620	\$10,229,024	\$10,287,595	\$10,476,548	\$4,412,204
(Adjusted Net Pension Liability + Net Tax-Supported Debt) / GDP	5.7%	5.8%	5.6%	6.5%	5.8%	8.2%

Note: Fixed costs utilize our "tread water" pension contribution calculation. Many states, like Georgia, report pension data one year in arrears. For this reason, "tread water" information is not yet available for fiscal 2018.

Sources: Georgia audited financial statements, Moody's Investors Service

## Profile

Georgia is the eighth largest state, with a population of 10.5 million. Its gross domestic product ranks ninth among states.

## Detailed credit considerations

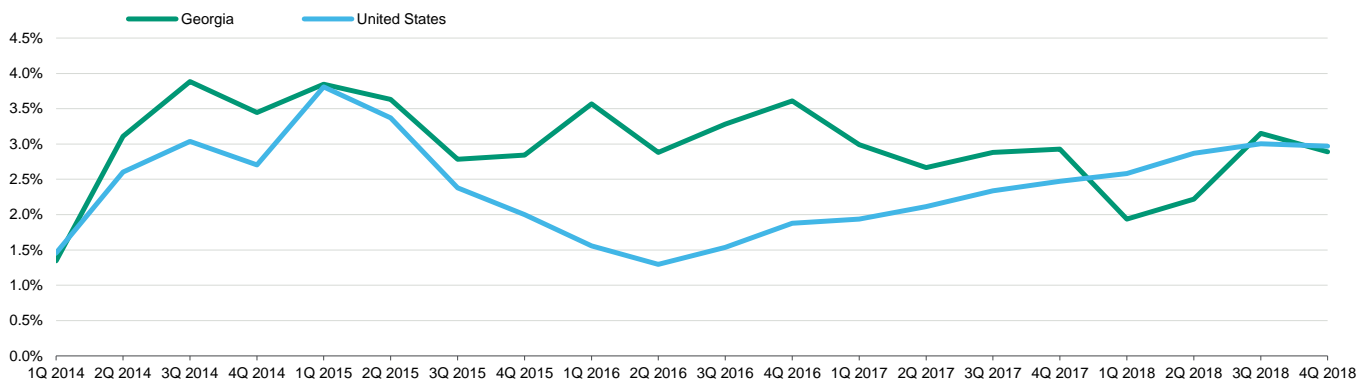
### Economy

Georgia's economy will remain strong as it continues to grow at a robust clip. The state's real gross domestic product (GDP) has grown at an average annual rate of 3.0% since 2014, surpassing the US rate (average annual rate of 2.4%) in 16 of the past 20 quarters (Exhibit 3). Economic growth moderated to 2.6% in 2018, and the US economy, which achieved its second highest growth rate since 2005, outperformed Georgia in three quarters last year. Nonetheless, with nominal GDP of \$588.2 billion, Georgia has the ninth largest state economy in the US, just behind [New Jersey](#) (A3 stable, \$624.9 billion) and narrowly ahead of [Massachusetts](#) (Aa1 stable, \$567.3 billion).

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Exhibit 3

### Georgia's GDP growth continues to be strong (Real GDP growth, % change year-on-year)



Sources: US Bureau of Economic Analysis; Moody's Investors Service

The engine of the state's economic outperformance is the [Atlanta](#) (Aa1 stable) metropolitan area, which has been adding jobs and attracting businesses in a diverse range of industries. The city's population was just under 500,000 in 2018, having grown 16.7% since 2010 – nearly double the state rate of 8.6% over this period. The broader Atlanta-Sandy Springs-Roswell metropolitan statistical area (MSA) – in which approximately 57% of the state's population lives – grew 12.2% over this period to nearly six million. Of the 41 MSAs with populations greater than one million, the Atlanta MSA had the 12th fastest population growth over this period. Only the Houston, Texas MSA is both larger and faster growing. Likewise, of the 28 MSAs with real GDPs greater than \$100 billion in 2017, the Atlanta MSA had the seventh fastest GDP growth, with only the San Francisco MSA having both a larger and faster growing economy.

Nonetheless, growth is likely to be more moderate over the next couple of years, albeit in line with recent historical rates, given a tightening labor market and the potential for rising interest rates.

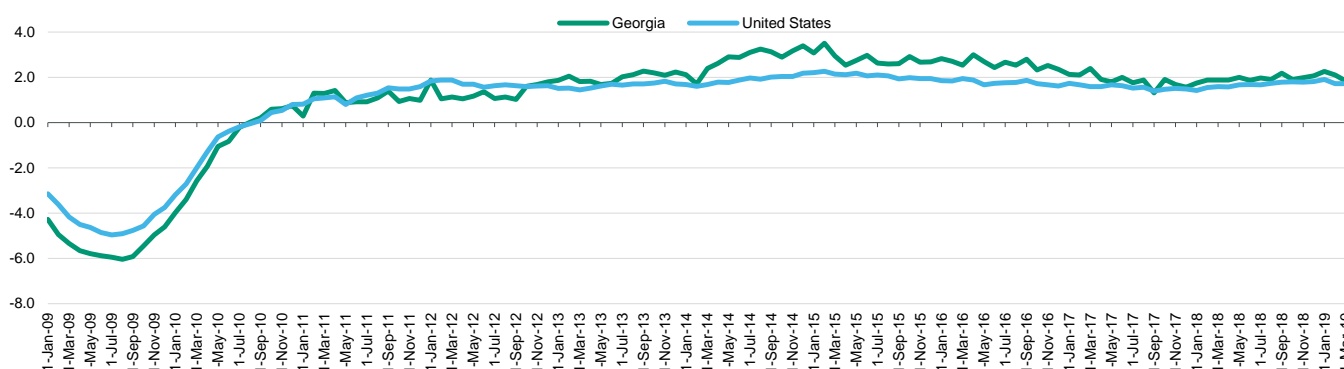
Georgia's economy is highly diversified. The largest sector, real estate, rental and leasing, contributed 11.5% to state GDP in 2018. Despite the negative impact on this sector during the last recession and its still prominent position in the economy, the risks are unlikely to be the same in the next recession. This sector was followed by government and government enterprises (11.2%), manufacturing (10.8%) and information (10.2%). Real annual growth was particularly robust in construction and manufacturing, which grew by 7.8% and 5.9%, respectively, last year.

Although per capita personal income (PCI) is lower than the US average and remains below the 94% of the early 2000s, Georgia's rapid economic growth has begun to shrink the gap over the past seven years, despite a very modest setback in 2018. PCI was 85.2% of the US average in 2018 (and 85.5% in 2017), an increase from a low of 83.3% in 2012. PCI has grown at an average annual rate of 3.2% over this period and 4.1% since 2014.

Employment growth remains strong – having grown by 1.9% in 2018 – and continues to outperform the national rate (1.7%) (Exhibit 4). The majority of employment is in trade, transportation and utilities (20.8%), followed by professional and business services (15.3%) and education and healthcare (12.9%). Employment, however, was hit particularly hard during the last recession as the collapse in the housing sector had knock-on effects on employment in construction, professional services, manufacturing and retail.

Exhibit 4

### Employment growth remains robust (% change, year-on-year)



Sources: US Bureau of Labor Statistics; Moody's Investors Service

Unemployment fell below 4.0% in May 2018 – the first such time since July 2001 – and stabilized at 3.8% in April 2019. The tight labor market has experienced a declining labor force participation rate to 62.5% over the past year, only marginally lower than the national rate of 62.8%.

### ENVIRONMENTAL CONSIDERATIONS

Like most US states, Georgia's exposure to environmental risks is low. As of the third quarter 2018, only 3.2% of establishments and 3.3% of average monthly employment, representing 2.7% of quarterly wages, was in a storm surge flood zone for category one through four hurricanes. Under 5.0% of non-coastal dwelling units are in 100/500 year floodplains and agriculture, forestry, fishing and hunting constitutes less than 1.0% of state GDP.

### Finances and liquidity

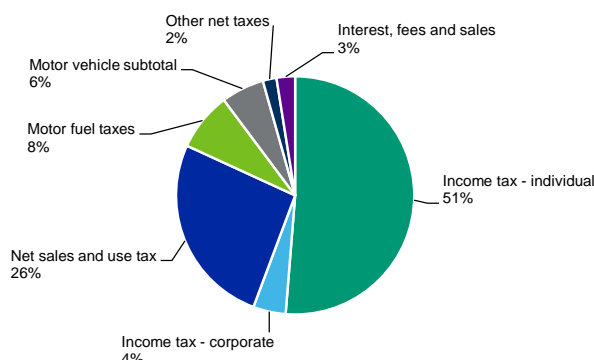
Georgia's economic growth has driven revenue growth, with own-source governmental revenues growing at a compound annual growth rate of 5.5% over the past eight years to \$26.4 billion from a post-crisis low of \$17.2 billion in 2010. Georgia remains fairly reliant on federal funds, with 38.5% of total revenues from federal sources. Although Georgia is not an expansion state, the largest source of federal funds is for Medicaid.

General fund revenues have performed well in fiscal 2019, growing 4.5% in the eleven months of the year. Individual income tax and net sales and use tax receipts made the largest contributions, growing by 4.1% and 5.4%, year-on-year over this period, respectively.

Indeed, these two taxes are the largest general fund revenue sources for Georgia. The individual income tax and net sales and use tax constituted 51.3% and 26.2% of total general fund revenues in fiscal 2018. Motor vehicle-related taxes, including fuel taxes, were an additional 13.8% of revenues (Exhibit 5).

Exhibit 5

### Georgia is heavily reliant on income and sales taxes (%, fiscal 2018)

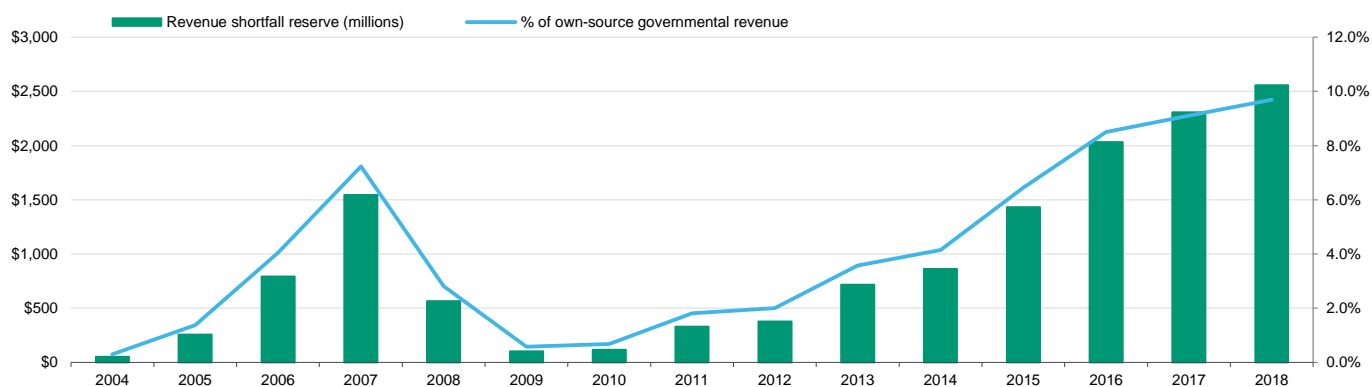


Sources: Georgia Department of Revenue, Moody's Investors Service

The revenue out-performance has strengthened Georgia's finances and contributed to the build-up in its rainy day fund (RDF), the revenue shortfall reserve, which is funded by prior year budget surpluses. The fund has grown to \$2.6 billion from its post-crisis low of \$103.7 million in 2009 and is nearly 66% bigger than its pre-crisis peak (Exhibit 6). The large buffer positions the state to successfully manage the next recession, particularly given a history of revenue volatility that led to large revenue declines in 2008-10 and near depletion of the reserve fund.

Exhibit 6

### Georgia continues to build reserves



Sources: Georgia budget reports; state CAFRs Moody's Investors Service

Georgia is anticipating strong revenue growth in fiscal 2020, with both state general fund and total treasury receipts forecasted to grow by 3.2% over the amended fiscal 2019 budget. The \$27.5 billion fiscal 2020 budget, however, is only 2.2% larger than the \$26.9 billion amended fiscal 2019 budget, which is consistent with Georgia's traditionally conservative budgeting practices. The bulk of new spending (\$532.2 million) is to support a \$3,000 pay increase for teachers.

In 2018, the legislature passed a law that conforms, with certain exceptions, the state tax code to the federal code following the passage of the Tax Cuts and Jobs Act (TCJA). In addition, the bill doubles the standard deduction and reduces the income tax rate from 6.0% to 5.5% in two stages.<sup>1</sup> The changes are forecasted to provide an additional \$265 million and \$393 million of revenue in fiscals 2019 and 2020, respectively, before causing a net loss of revenue of \$467 million and \$340 million in fiscals 2021 and 2022, respectively. Such a loss in revenue will have minimal impact on the state's finances, given a lack of significant spending challenges. These provisions sunset at the end of 2025 in line with the sunset provisions in the TCJA.

## LIQUIDITY

Georgia's liquidity has improved, as well. Although most of the state's available liquidity consists of the revenue shortfall reserve, the state treasurer also reports "excess liquidity," which is typically in the range of an additional \$1 billion. Over the first two quarters of fiscal 2019, Georgia had an additional \$1.3 billion in excess liquidity.

Georgia's revenue shortfall reserve and excess liquidity, which combined approximate 15% of own-source governmental revenues at the end of fiscal 2018, are sufficient to manage normal revenue volatility. Pressure, however, could arise in the midst of another large recession, which absent expenditure cuts would consume much of the state's reserves. In 2009, revenues fell 10.7% year-on-year, while over a three-year period revenues fell a total of 19.6%, yielding cuts to spending.

## Debt and pensions

Georgia's long-term liabilities are moderate, and unlikely to grow to a level that pressures the state's budget. The state's combined net tax-supported debt and Moody's-adjusted net pension liability were equal to 6.5% of gross domestic product in 2017, which is the 17th-lowest among states. The state's OPEB liability is also small and well-managed.

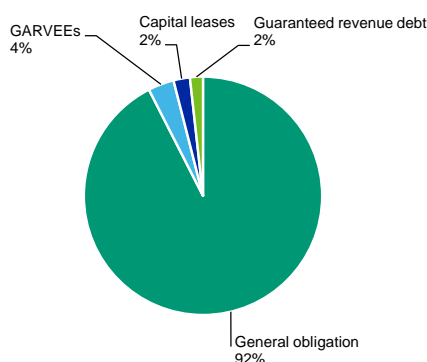
## DEBT STRUCTURE

Georgia has \$10.5 billion of net tax-supported debt. This represents 2.3% of personal income, slightly more than the US state median (2.2%). Primarily, the debt burden reflects the fact that Georgia borrows on behalf of public school districts and for higher education projects (in contrast to many states, where this borrowing is mainly conducted by the school districts or universities themselves). More than 60% of the state's general obligation debt authorizations are for public education.

Georgia is heavily reliant on general obligation debt, which constitutes 92.5% of debt outstanding. Only [Hawaii](#) (Aa1 stable) has a higher share of general obligation debt at 92.6%. Georgia has a small amount of GARVEE debt (3.5%) and state guaranteed revenue bonds (1.8%) – the latter are backed by the full faith and credit of the state. The remainder consists of capital leases. (Exhibit 7).

Exhibit 7

### Georgia is heavily reliant on general obligation debt (%)



Sources: Georgia audited financial statements, Moody's Investors Service

Debt will remain flat over the next few years. Although debt increased 1.8% in 2018, outstanding net tax-supported debt has fallen 3.8% since 2010. The state historically has authorized around \$900 million to \$1 billion of general obligation borrowing each year, which is on par with annual principal maturities. The state's debt management plan anticipates \$1.2 billion in annual authorizations in 2020-2023.

The state's maintenance of relatively static debt levels has, in part, been supported by an increase in the state's pay-go funding of transportation, which followed an increase in the gas tax in 2015. Total governmental fund expenditures on transportation increased 13.4% in 2015 and reached \$2.9 billion in 2018 – 56% higher than 2014 levels.

The state's approach to debt management reflects Georgia's commitment to maintaining an affordable debt burden. When the recession pushed debt service to more than 7% of revenues in fiscal 2011, the state responded by borrowing less and the debt service ratio fell to 5.9% in 2018. The state's commitment to limiting growth in debt is one of several material governance strengths.

The state's five-year debt management plan limits debt service to 7% of prior year revenues (8% including GARVEEs), a more restrictive policy than the 10% limit imposed under the state's constitution. According to the plan, actual debt service will be under 6% through 2023.

Exhibit 8

**Georgia's net tax-supported debt**

	2016	2017	2018	% of total (2018)
<b>Net Tax-Supported Debt</b>	<b>10,229,024</b>	<b>10,287,595</b>	<b>10,476,548</b>	<b>100.0%</b>
General obligation	9,152,050	9,302,040	9,691,210	92.5%
GARVEEs	624,540	521,130	367,905	3.5%
Capital leases	184,689	237,505	233,398	2.2%
Guaranteed revenue debt	267,745	226,920	184,035	1.8%
<b>Self-Supporting Debt</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.0%</b>
<b>Gross Tax-Supported Debt</b>	<b>10,229,024</b>	<b>10,287,595</b>	<b>10,476,548</b>	<b>100.0%</b>

Sources: Georgia audited financial statements; Moody's Investors Service

**DEBT-RELATED DERIVATIVES**

All of Georgia's debt is fixed rate.

**PENSIONS AND OPEB**

Georgia contributes to eight pension plans, although the bulk of the state's pension liabilities are accounted for by the Employees' Retirement System (ERS) and the Teachers Retirement System (TRS), which are the two largest in terms of both employees and liabilities. The state is responsible for 90.3% of the ERS and much smaller shares of the TRS (17.3%) and the component units of the ERS (1.5%) and TRS (0.6%). Georgia also makes 100% of the contributions for the peace officers, firefighters, judicial retirement and public school employee plans. Although these latter plans are small, constituting just 5.8% of total 2018 liabilities, the state does make contributions on behalf of certain non-state employers.

Georgia's pension liabilities are below average. Using standard Moody's adjustments, we estimate Georgia's adjusted net pension liability (ANPL) at \$26.2 billion, or 5.8% of personal income in 2017. This is a more modest exposure than most other states (the median ANPL to personal income is 6.9%). Georgia's pension burden is favorable compared to some Aaa-rated states; of the 15 states rated Aaa, eight have higher ANPL to own-source revenue ratios than Georgia.

The low liabilities facilitate pension contributions that are more than sufficient to "tread water," which prevents the net pension liability from growing on an actuarial basis, as long as all actuarial assumptions are met. The state's contributions for its proportionate share of relevant plans as a percentage of tread water were 114.8% in fiscal 2016. Nonetheless, overall contributions to TRS, which are predominantly made by school districts, are not treading water. Although these are not state liabilities, schools' ANPL burdens are higher than average and there is risk that the state may need to fund a larger portion of the plan if costs grow significantly beyond the capacity of school districts.

Likewise, Georgia's other post-employment benefits (OPEB) liability is small and well-managed. Moody's adjusted net OPEB liability is \$3.9 billion or 16.3% of own-source revenues. Georgia has the fourth largest assets among state OPEB plans and contributions (2.0% of own-source revenues) are well above the tread-water rate (1.0%).

Georgia administers three OPEB plans – the State OPEB Fund, School OPEB Fund and the SEAD-OPEB Plan (for eligible members of the ERS and the judicial and legislative retirement systems). The bulk of the liabilities are in the School OPEB Fund (74%); however, the state's proportionate share of this fund is approximately 1%. The state is responsible for 92% and 90% of the State OPEB Fund and SEAD-OPEB Plan, respectively. The SEAD-OPEB Plan has a net asset position of \$270.6 million, according to state figures.

### Governance

Georgia's strong governance framework and financial management practices have helped to support the state's rating over many years. Statutory and constitutional provisions have helped keep financial operations largely balanced and have encouraged strong recovery from previous economic downturns. The state's constitution limits growth in appropriations to net projected revenues from existing sources, plus appropriations from reserves. Projected revenue is determined by the governor, giving the executive strong power to constrain expenditures. A history of prompt spending cuts in response to revenue shortfalls has been an important aspect of the state's credit profile.



## Rating methodology and scorecard factors

Exhibit 9

### States rating methodology scorecard

Georgia (state of)

Rating Factors	Measure	Score
<b>Factor 1: Economy (25%)</b>		
a) Per Capita Income Relative to US Average [1]	85.2%	Aa
b) Nominal Gross Domestic Product (\$ billions) [1]	\$588.2	Aaa
<b>Factor 2: Finances (30%)</b>		
a) Structural Balance	Aaa	Aaa
b) Fixed Costs / State Own-Source Revenue [2]	11.2%	Aa
c) Liquidity and Fund Balance	Aa	Aa
<b>Factor 3: Governance (20%)</b>		
a) Governance / Constitutional Framework	Aaa	Aaa
<b>Factor 4: Debt and Pensions (25%)</b>		
a) (Moody's ANPL + Net Tax-Supported Debt) / State GDP [2] [3]	6.2%	Aaa
<b>Factors 5 - 10: Notching Factors [4]</b>		
Adjustments Up: Growth Trend	0.5	
Adjustments Down: None	0	
<b>Rating:</b>		
a) Scorecard-Indicated Outcome		Aaa
b) Actual Rating Assigned		Aaa

Note:

[1] Economy measures are based on data from the most recent year available.

[2] Fixed costs and debt and pension measures are based on data from the most recent debt and pensions medians report published by Moody's.

[3] ANPL stands for adjusted net pension liability.

[4] Notching factors 5-10 are specifically defined in the US States and Territories Rating Methodology.

Source: US Bureau of Economic Analysis, State CAFRs, Moody's Investors Service

## Endnotes

- 1 The first rate cut, to 5.75% from 6.0%, occurred on January 1, 2019. The second rate cut, to 5.5% from 5.75%, will occur on January 1, 2020, subject to legislative approval.

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